

Title 50—Wildlife and Fisheries

CHAPTER 1—UNITED STATES FISH AND WILDLIFE SERVICE, DEPARTMENT OF THE INTERIOR

SUBCHAPTER B—TAKING, POSSESSION, TRANSPORTATION, SALE, PURCHASE, EXPORTATION AND IMPORTATION OF WILDLIFE

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

Determination That the Tan Riffle Shell is an Endangered Species

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rulemaking.

SUMMARY: The Director, U.S. Fish and Wildlife Service issues a rule which determines the tan riffle shell (*Epioblasma walkeri*) to be an Endangered species because of the likelihood that this mussel could become extinct within the foreseeable future.

DATES: The amendments will become effective on September 26, 1977.

FOR FURTHER INFORMATION CONTACT:

Mr. Keith M. Schreiner, Associate Director—Federal Assistance, Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C. 20240 (202-343-4646).

SUPPLEMENTARY INFORMATION: The Director, U.S. Fish and Wildlife Service (hereinafter the Director and the Service, respectively) hereby issues a rulemaking pursuant to Section 4 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1543; 87 Stat. 884; hereinafter the Act) which determines the tan riffle shell (*Epioblasma walkeri*) to be an Endangered species.

BACKGROUND

On September 26, 1975, the Service published a proposed rulemaking in the *FEDERAL REGISTER* (40 FR 44329) advising that sufficient evidence was on file to support a determination that the tan riffle shell was an Endangered species as provided for by the Act. That proposal summarized the factors thought to be contributing to the likelihood that this mussel could become extinct within the foreseeable future; specified the prohibitions which would be applicable if such a determination were made; and solicited comments, suggestions, objections and factual information from any interested person.

Section 4(b)(1)(A) of the Act requires that the Governor of each State, within which a resident species of wild-

life is known to occur, be notified and be provided 90 days to comment before any such species is determined to be a Threatened species or an Endangered species. Letters were sent to the Governors of Virginia, Kentucky, and Tennessee on June 25, 1976, notifying them of the proposed rulemaking. Such letters were inadvertently not sent at the time of the proposed rulemaking in 1975.

SUMMARY OF COMMENTS AND RECOMMENDATIONS

Section 4(b)(1)(C) of the Act requires that a " * * * summary of all comments and recommendations received * * * be published in the *FEDERAL REGISTER* prior to adding any species to the List of Endangered and Threatened Wildlife."

In the September 26, 1975, *FEDERAL REGISTER* proposed rulemaking (40 FR 44329) and the related press release, all interested parties were invited to submit factual reports or information which might contribute to the formulation of a final rulemaking.

Comments were received from three States and one individual. In a letter dated July 19 from Governor Julian M. Carroll, the State of Kentucky did "not wish to register any opposition to the action" and considered the tan riffle shell to be restricted to the Red River, in Logan and Simpson Counties, Kentucky, in rather limited numbers. The State of Virginia, according to Earl J. Shiftlet of the Office of the Governor in a letter dated July 14, 1976, did not have sufficient information available regarding the status of this mussel in Virginia to make a judgment as to whether it should be designated Endangered pursuant to the Act. However, this State did not believe that overharvesting was an immediate danger. The State of Tennessee, in a letter dated September 16, 1976, from Harvey Bray, Executive Director, Tennessee Wildlife Resources Agency, supported the listing of *Epioblasma walkeri* "based on its limited occurrence in the Clinch, Powell and Duck Rivers and its rapid rate of disappearance." They further recommended that the Department of the Interior "do all possible to implement, in cooperation with States, a realistic program aimed at water quality improvement as the prime means of effecting a recovery program for Endangered mussels and habitats; encourage designation of acceptable comprehensive classification and nomenclatural terms, and distribution and population data; and that immediate research be coordinated to determine management procedures (relating to impoundment effects, commercial and scientific mussel use, and to industrial, municipal, and agricultural practices) which will best assure perpetuation of these mussels."

The Service received a report on the status of *Epioblasma walkeri* from Dr. David H. Stansbery, Museum of Zoology, The Ohio State University, Columbus, Ohio, which resulted from contract 14-16-0008-755. This report (RF 37 12 Final No. 6, October 1976, The Ohio State University Research Foundation, 1314 Kinnear Road, Columbus, Ohio 43212) summarized the synonymy, taxonomic status,

diagnostic characteristics, former distribution (a rather general distribution in medium small to large streams in both the Cumberland and Tennessee systems), the present distribution (Middle Fork Holston River above South Holston impoundment, Red River of the Cumberland system, Clinch River and the Duck River from Wilhoite Mill downstream to Columbia) and threats. Threats include sewage effluent from Marion, Chilhowie and other communities in the middle fork Holston. The TVA Columbia Dam, if completed, would inundate the entire Duck River population of the mussel.

CONCLUSION

After a thorough review and consideration of all information available, the Director has determined that the tan riffle shell is in danger of extinction throughout all or a significant portion of its range due to one or more of the factors described in Section 4(a) of the Act. This review amplifies and substantiates the description of those factors included in the proposed rulemaking (40 FR 44329). Those factors are as follows:

1. *The present or threatened destruction, modification, or curtailment of its habitat or range.* The tan riffle shell is a pearly mussel and it exemplifies a well known characteristic of its genus (*Epioblasma*): It characteristically inhabits riffle areas of medium to large streams. Species adapted to live in such riffle areas are particularly vulnerable to power dams because of the voluminous, rapid water flow, as well as to pollution because of their large oxygen requirement. About a third of the three dozen *Epioblasma* species are presumed extinct.

The tan riffle shell formerly had a rather general distribution in medium small to large streams in both the Cumberland and Tennessee River systems. It is presently found only in the lower Red River of the Cumberland system in Kentucky and Tennessee, the middle fork of the Holston River in Virginia, possibly the Stones River in Tennessee where it would be very rare, the Duck River in Tennessee from Wilhoite Mill downstream to Columbia, and the Clinch River in Virginia and Tennessee where it is very rare. It is endangered in all of these rivers by pollution, including mine acid and municipal wastes. Pollution problems include low dissolved oxygen below Adairville and untreated effluent from a meat packing plant in the Red River system; mercury and lead in the middle fork of the Holston; low dissolved oxygen at Murfreesboro in the west fork Stones River; and lead, mercury, and a history of accidental spills of fly ash and sulfuric acid in the Clinch River. It is further endangered by channelization of the upper Clinch and by the TVA dam being constructed on the Duck River at Columbia. This dam will inundate and thereby extirpate the Duck River population.

Information on the mechanism by which physical and chemical factors jeopardize *Epioblasma* and other genera of mussels appeared in the "Proceedings of a Symposium on Rare and Endangered

Molluscs of the U.S.", Fish and Wildlife Service, Federal Building, Fort Snelling, Twin Cities, Minnesota 55111, August 10, 1971; and "Greater Adaptability of Freshwater Mussels to Natural Rather than to Artificial Displacement" by Marc J. Imlay, which appeared in the *Nautilus* (1972, 86:76-79). In general, the mussels were demonstrated to be better adapted to naturally occurring stresses than to artificial ones. For example, 25 transplanted mussels (the result of dredging) lay on their sides and were disoriented in a stream where other mussels had re-oriented after natural storms had washed them downstream.

Information on water quality appeared in material supplied by the Virginia State Water Control Board, Southwestern Regional Office; Division of Water Quality, Kentucky Department for Natural Resources and Environmental Protection; Proposed Criteria for Water Quality, Volume I, October 1973, U.S. Environmental Protection Agency, Washington, D.C. 20460; and Water Resources Data for Tennessee Water Year 1975, U.S. Geological Survey TN 75 1.

2. *Overutilization for commercial, sporting, scientific, or educational purposes.* This species appears on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora because it is threatened with extinction and could enter into previously unregulated international commerce. The impact of this commerce (pearl button and Japanese cultured pearl industry) on the tan riffle shell, while significant, is relatively minor, however, compared to the impact on mussel species with thick shells.

3. *Disease or predation.* Not applicable for this species.

4. *The inadequacy of existing regulatory mechanisms.* No regulations currently exist pertaining to the protection and conservation of this species other than the prohibitions against international trade that apply to species such as *E. walkeri* which are on Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora. These regulations provide no protection against taking for domestic purposes.

5. *Other natural or manmade factors affecting its continued existence.* During the mid-1950s the Asian clam, *Corbicula manilensis*, was introduced into the Tennessee River system. *Corbicula* has spread throughout the Tennessee River system where it has replaced many beds of native mussels including the tan riffle shell. A square yard of bottom frequently contains hundreds of individual Asian clams. Information on *Corbicula* appeared in the "Proceedings of a Symposium on Rare and Endangered Molluscs of the U.S.", U.S. Fish and Wildlife Service, Federal Building, Fort Snelling, Twin Cities, Minnesota 55111, August 10, 1971.

EFFECT OF THE RULEMAKING

The effects of these determinations and this rulemaking include, but are

not necessarily limited to, those discussed below. Endangered Species regulations already published in Title 50 of the Code of Federal Regulations set forth a series of general prohibitions and exceptions which apply to all endangered species. The prohibited regulations referred to above, which pertain to Endangered species, are found in § 17.21 of Title 50 and, for the convenience of the reader, are reprinted below:

§ 17.21 Prohibitions.

(a) Except as provided in Subpart A of this part, or under permits issued pursuant to § 17.22 or § 17.23, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit or cause to be committed, any of the acts described in paragraphs (b) through (d) of this section in regard to any endangered wildlife.

(b) *Import or export.* It is unlawful to import or to export any endangered wildlife. Any shipment in transit through the United States is an importation and an exportation, whether or not it has entered the country for customs purposes.

(c) *Take.* (1) It is unlawful to take any endangered wildlife within the United States within the territorial sea of the United States, or upon the high seas. The high seas shall be all waters seaward of the territorial sea of the United States, except waters officially recognized by the United States as the territorial sea of another country, under international law.

(2) Notwithstanding paragraph (c)(1) of this section, any person may take endangered wildlife in defense of his own life or the lives of others.

(3) Notwithstanding paragraph (c)(1) of this section, any employee or agent of the Service, any other Federal land management agency, the National Marine Fisheries Service, or a State conservation agency, who is designated by his agency for such purposes, may, when acting in the course of his official duties, take endangered wildlife without a permit if such action is necessary to:

(i) Aid a sick, injured or orphaned specimen; or

(ii) Dispose of a dead specimen; or

(iii) Salvage a dead specimen which may be useful for scientific study; or

(iv) Remove specimens which constitute a demonstrable but nonimmediate threat to human safety, provided that the taking is done in a humane manner: the taking may involve killing or injuring only if it has not been reasonably possible to eliminate such threat by live-capturing and releasing the specimen unharmed, in a remote area.

(4) Any taking pursuant to paragraph (c)(2) and (3) of this section must be reported in writing to the United States Fish and Wildlife Service, Division of Law Enforcement, P.O. Box 19183, Washington D.C. 20036, within 5 days. The specimen may only be retained, disposed of, or salvaged in accordance with directions from the Service.

(5) Notwithstanding paragraph (c)(1) of this section, any qualified employee or agent of a State Conservation Agency which is a party to a Cooperative Agreement with the Service in accordance with section 6(c) of the Act, who is designated by his agency for such purposes, may, when acting in the course of his official duties take Endangered Species, for conservation programs in accordance with the Cooperative Agreement provided that such taking is not reasonably

anticipated to result in: (i) the death or permanent disabling of the specimen; (ii) the removal of the specimen from the State where the taking occurred; (iii) the introduction of the specimen so taken, or of any progeny derived from such a specimen, into an area beyond the historical range of the species; or (iv) the holding of the specimen in captivity for a period of more than 45 consecutive days."

(d) *Possession and other acts with unlawfully taken wildlife.* (1) It is unlawful to possess, sell, deliver, carry, transport, or ship, by any means whatsoever, any endangered wildlife which was taken in violation of paragraph (c) of this section.

Example. A person captures a whooping crane in Texas and gives it to a second person, who puts it in a closed van and drives thirty miles, to another location in Texas. The second person then gives the whooping crane to a third person, who is apprehended with the bird in his possession. All three have violated the law—the first by illegally taking the whooping crane; the second by transporting an illegally taken whooping crane; and the third by possessing an illegally taken whooping crane.

(2) Notwithstanding paragraph (d) (1) of this section, Federal and State law enforcement officers may possess, deliver, carry, transport or ship any endangered wildlife taken in violation of the Act as necessary in performing their official duties.

(e) *Interstate or foreign commerce.* It is unlawful to deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever, and in the course of a commercial activity, any endangered wildlife.

(f) *Sale or offer for sale.* (1) It is unlawful to sell or to offer for sale in interstate or foreign commerce any endangered wildlife.

(2) An advertisement for the sale of endangered wildlife which carries a warning to the effect that no sale may be consummated until a permit has been obtained from the U.S. Fish and Wildlife Service shall not be considered an offer for sale within the meaning of this subsection.

The determination set forth in this final rulemaking also makes the tan rifle shell eligible for the consideration provided by Section 7 of the Act. That Section reads as follows:

"The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act. All other Federal departments and agencies shall, in consultation with and with the assistance of the Secretary, utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to section 4 of this Act and by taking such action necessary to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence of such endangered species and threatened species or result in the destruction or modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with the affected States, to be critical."

The Director has prepared, in consultation with an ad hoc interagency committee, guidelines for Federal agencies for the application of Section 7 of the Act. Proposed regulations were published regarding Section 7 (42 FR 4868; January 26, 1977). When this rulemaking becomes effective, all Federal agencies will be required to meet their responsibilities under Section 7 of the Act,

and where appropriate, utilize the consultation procedures contained in Section 7 guides and the proposed regulations.

Regulations which appear in Part 17, Title 50 of the Code of Federal Regulations were first published in the FEDERAL REGISTER of September 26, 1975 (40 FR 44412), and provide for the issuance of permits to carry out otherwise prohibited activities involving Endangered or Threatened species under certain circumstances.

NATIONAL ENVIRONMENTAL POLICY ACT

An environmental assessment has been prepared and is on file in the Service's Washington Office of Endangered Species. It addresses this action as it involves the tan rifle shell. The assessment and the public comments received on this rulemaking are the basis for a decision that these determinations are not major Federal actions which would signifi-

cantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969.

(Endangered Species Act of 1973 (U.S.C. 1531-1543; 87 Stat. 884).)

This final rulemaking was prepared by Dr. Marc J. Imlay, Office of Endangered Species.

NOTE.—The Department of the Interior has determined that this document does not contain a major proposal requiring preparation of an Economic Impact Statement under Executive Order 11949 and OMB Circular A-107.

Dated: May 10, 1977.

LYNN A. GREENWALT,
Director, Fish and Wildlife Service.

According to § 17.11 of Part 17 of Chapter 1 of Title 50 of the U.S. Code of Federal Regulations is amended as follows:

1. By adding the tan rifle shell to the list under "Clams" as indicated below:

Species			Range		Status	When listed	Special rules
Common name	Scientific name	Population	Known distribution	Portion of range where threatened or endangered			
Rifle shell, tan...	<i>Epioblasma walkeri</i>	NA	Virginia, Tennessee, Kentucky.	Entire.....	E	27	NA

[FR Doc. 77-24431 Filed 8-22-77; 8:45 am]